Mandated report on clinician payment in Medicare
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Chapter summary

The Medicare Access and CHIP Reauthorization Act of 2015 (MACRA) repealed the previous formula for setting clinician fees (the sustainable growth rate, or SGR), established permanent statutory updates for clinician services in Medicare, created an incentive payment for clinicians who participate in certain types of payment arrangements, and created a new value-based purchasing program for all other clinicians. MACRA also requires the Commission to conduct a study of the statutory updates to clinician services from 2015 through 2019 and the effect these payment updates have on the access to and supply and quality of clinician services. The statutory updates were 0.5 percent each year from 2015 through 2018 and 0.25 percent in 2019 (changed from 0.5 percent to 0.25 percent in the Bipartisan Budget Act of 2018). The statutory update for 2020 through 2025 is 0 percent.

The Commission’s statutory framework requires that we assess the payment adequacy of each sector (including the clinician sector) every year and make a recommendation on any necessary update. To conduct the payment adequacy assessment for physician and other health professional services, the Commission reviews a direct measure of access to care (a telephone survey), two indirect access measures (the supply of clinicians billing Medicare and changes in the volume of services), quality measures, and clinician input costs.

In this chapter

- Introduction
- Medicare’s payment system for clinician services
- The Commission’s assessment of payment adequacy
- Conclusion
To fulfill this mandate, we review the rate-setting and update process for Medicare’s fee schedule and measures of payment adequacy over a longer time frame than is covered in our yearly payment assessments. Overall, payment updates for clinician services have generally been in the range of 0 percent to 1 percent each year since 2011. Our yearly assessment has found most measures of payment adequacy for clinician services generally to be positive or stable. Two notable features that may affect our payment adequacy measures are difficulties with nonresponse rates in telephone surveys (difficulties that are common to researchers in all fields that rely on telephone surveys) and the effect of site-of-service changes on fee schedule volume and spending.

Access for Medicare beneficiaries continues to be relatively stable and as good as or slightly better than access for individuals with private insurance. Volume growth varied by type of service, and some services have significantly shifted across settings, affecting both volume and spending for clinician services. Medicare’s payment rates relative to private sector payment rates fell slightly from 81 percent to 75 percent since 2011, generally due to higher growth in private sector prices for clinician services. There continue to be disparities in physician compensation by specialty, which implicates mispricing in the fee schedule for certain ambulatory evaluation and management services relative to other services. Finally, our ability to detect and report national trends for Medicare clinician quality is limited.

Medicare’s yearly payment rate update for clinician services has ranged from no update to 1 percent over the past decade, which is consistent with the updates from 2015 to 2018 (0.5 percent), 2019 (0.25 percent), and 2020 to 2025 (no update). To date, these payment updates have been associated with generally stable measures of access to clinician services for Medicare beneficiaries. The statutory mandate directing the Commission to conduct this evaluation requires us to make recommendations for future updates to the fee schedule rates that would be necessary to ensure Medicare beneficiaries’ access to care. The trends we have observed over the last decade suggest that updates in the range of 0 percent to 1 percent have been sufficient to ensure beneficiary access to care, and we have recommended similar updates to physician payments based on these indicators. However, there is no certainty that this relationship will continue to hold in future years. Therefore, we will continue to evaluate the most currently available data on measures of payment adequacy and advise the Congress accordingly on our recommended payment updates on a year-by-year basis. Further, other patterns raise questions about the relationship between payment rates and access, suggesting that other factors may be more important than payment rate updates in maintaining beneficiary access to clinician services.
Introduction

In the Medicare Access and CHIP Reauthorization Act of 2015, the Congress mandated that the Commission report on the effect of the statutory payment updates for clinician services from 2015 through 2019 on access to care, quality of care, and the supply of clinicians (see text box for mandate).

Although we reviewed evidence for the years mandated (where available) through 2018, we do not have complete data covering the time period requested by the mandate, particularly for 2019. We examined the evidence for some prior years, when payment updates were generally comparable to the statutory updates specified for 2015 through 2019. Topics covered in this chapter include:

- Medicare’s payment system for clinician services;
- Medicare’s statutory payment update, conversion factors, and spending growth for clinician services;
- the Commission’s payment adequacy assessment framework, including:
  - trends in telephone survey nonresponse;
  - the effect of site-of-service changes on fee schedule volume and spending and the implications for Medicare payment policy;
- trends in the payment adequacy indicators over time; and
- a summary of overall trends in Medicare’s payment updates in relation to those payment adequacy indicators.

Medicare’s payment system for clinician services

In 2017, Medicare paid $69.1 billion for clinician services delivered by over 1 million clinicians in all settings.1 Among clinicians billing for more than 15 unique beneficiaries each, there were 596,000 physicians and 389,000 advanced practice registered nurses, physician assistants, therapists, chiropractors, and other practitioners. Medicare pays for the services provided by physicians and other health professionals under Part B of Medicare using a fee schedule.

Medicare’s fee schedule for clinician services contains payment rates for over 7,000 distinct services identified by Healthcare Common Procedure Coding System—HCPCS—codes (which include Current Procedural Terminology codes). In determining payment rates for each service, CMS considers (1) the amount of clinician work required to provide a service, (2) expenses related

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Statutory mandate: Public Law 114–10

(C) REPORT ON UPDATE TO PHYSICIANS’ SERVICES UNDER MEDICARE.—Not later than July 1, 2019, the Medicare Payment Advisory Commission shall submit to Congress a report on—

(i) the payment update for professional services applied under the Medicare program under title XVIII of the Social Security Act for the period of years 2015 through 2019;

(ii) the effect of such update on the efficiency, economy, and quality of care provided under such program;

(iii) the effect of such update on ensuring a sufficient number of providers to maintain access to care by Medicare beneficiaries; and

(iv) recommendations for any future payment updates for professional services under such program to ensure adequate access to care is maintained for Medicare beneficiaries. ■
Medicare’s conversion factor for clinician services

CMS updates the conversion factor each year using any applicable statutory update plus other statutory or regulatory adjustments. Each year, through the fee schedule rule-making process, CMS outlines new, revised, and deleted codes from the fee schedule for clinician services, including adjustments to the relative values. CMS also reviews potentially mispriced services and may adjust their RVUs. CMS then applies a budget-neutrality adjustment so that, in aggregate, the total RVUs remain constant from one year to the next.²

As part of this process, CMS also applies any relevant statutory payment policies. For example, the Congress established a statutory provision setting a target for CMS to adjust the prices of misvalued services for a three-year period (2016 through 2018). The target was set at 1 percent of fee schedule spending for 2016 and 0.5 percent for 2017 and 2018. CMS did not meet the target in any of the three years, which meant that payment rates for all fee schedule services were reduced by the difference between the target and the actual aggregate reduction to the RVUs of misvalued services.

Separately, CMS can use its regulatory authority to make technical adjustments to the relative weights or conversion factors. For example, in 2011 and 2014, CMS made a large adjustment to the practice expense (PE)
and professional liability insurance (PLI) RVUs, and a commensurate adjustment to the conversion factor, based on a revision to the Medicare Economic Index (MEI) (Table 4-2). This MEI rescaling adjustment affected the PE and PLI RVUs as well as the conversion factor, but on net, the adjustment did not affect total payments to clinicians. In other words, although the net effective update to the conversion factor declined in 2011 and then increased in 2014, total payments to clinicians were not affected as a result of these changes.

CMS may also apply other modifications or assumptions to the fee schedule through the yearly regulatory process, such as applying a multiple procedure payment reduction to certain services. All of these factors contribute to a difference between the statutory update and the ultimate change in the conversion factor each year.

### TABLE 4-2 Statutory updates and net effective update to the conversion factor

<table>
<thead>
<tr>
<th>CY</th>
<th>Statutory update</th>
<th>RVU budget-neutrality adjustment</th>
<th>Misvalued codes target recapture amount</th>
<th>Imaging MPPR adjustment</th>
<th>Rescaling to match MEI weights</th>
<th>Net effective update to the conversion factor</th>
<th>Conversion factor on January 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td>0%</td>
<td>0.45%</td>
<td>N/A</td>
<td>N/A</td>
<td>–8.19%*</td>
<td>–7.74%*</td>
<td>$33,9764</td>
</tr>
<tr>
<td>2012</td>
<td>0%</td>
<td>0.18</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>0.18</td>
<td>$34,0376</td>
</tr>
<tr>
<td>2013</td>
<td>0%</td>
<td>–0.043</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>–0.04</td>
<td>$34,0230</td>
</tr>
<tr>
<td>2014</td>
<td>0.5%</td>
<td>0.046</td>
<td>N/A</td>
<td>N/A</td>
<td>4.718*</td>
<td>5.29*</td>
<td>$35,8228</td>
</tr>
<tr>
<td>2015</td>
<td>0%</td>
<td>–0.06</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>0.31</td>
<td>$35,9335</td>
</tr>
<tr>
<td>(January–March)</td>
<td>0.5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2016</td>
<td>0.5%</td>
<td>–0.076</td>
<td>–0.78%</td>
<td>N/A</td>
<td>N/A</td>
<td>–0.36</td>
<td>$35,8043</td>
</tr>
<tr>
<td>2017</td>
<td>0.5%</td>
<td>–0.013</td>
<td>–0.18</td>
<td>N/A</td>
<td>–0.07%</td>
<td>0.24</td>
<td>$35,8887</td>
</tr>
<tr>
<td>2018</td>
<td>0.5%</td>
<td>–0.10</td>
<td>–0.09</td>
<td>N/A</td>
<td>N/A</td>
<td>0.31</td>
<td>$35,9996</td>
</tr>
<tr>
<td>2019</td>
<td>0.25%</td>
<td>–0.14</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>0.11</td>
<td>$36,0391</td>
</tr>
</tbody>
</table>

Note: CY (calendar year), RVU (relative value unit), MPPR (multiple procedure payment reduction), MEI (Medicare Economic Index), N/A (not applicable). *Conversion factor adjustments in 2011 and 2014 maintained the budget neutrality of practice expense (PE) and professional liability insurance (PLI) RVUs that were rescaled to match revised MEI weights. A –8.19 percent adjustment in 2011 to the conversion factor offset PE and PLI RVUs that were rescaled upward based on a survey of physician practice costs. A 4.718 percent adjustment to the conversion factor in 2014 offset a reduction of PE and PLI RVUs that were rescaled downward based on a reclassification of expenses for nonphysician clinical personnel who can bill independently (e.g., nurse practitioners) from PE to clinician work.


### Statutory payment updates for clinician services

From 1997 to 2015, Medicare payment for clinician services was governed by a statutory formula, the sustainable growth rate (SGR). The SGR was intended to limit growth in Medicare fee schedule spending to a target based on a formula comprising changes in gross domestic product, clinician input prices, growth in fee-for-service (FFS) enrollment, and changes in law and regulation. Because annual spending generally exceeded the SGR target, payments to clinicians were scheduled to be reduced by rising amounts, with the first reduction scheduled in 2002. The Congress overrode these payment reductions in all but the first year they were scheduled, providing either no update or updates in the 0.5 percent to 2 percent range to clinician fees as part of these overrides. Over time, these overrides, combined with continued
Other factors can affect spending

Separate from the rate-setting process, other changes in clinician billing and practice patterns affect total spending for Medicare clinician services.

First, Medicare makes additional payment adjustments to reflect certain policies (e.g., adjusting for whether the clinician participated in certain quality or value programs, resided in a health professional shortage area, or is part of Medicare’s participating provider program) or certain provider types (most advanced practice registered nurses and physician assistants are paid at 85 percent of the fee schedule amount if they bill Medicare directly). Changes in the share of clinicians who are subject to these adjustments affect total spending.

Second, changes in where a service is provided (e.g., in a hospital setting or a physician office) can affect both fee schedule volume and spending, as well as total Medicare spending.
The Commission’s assessment of payment adequacy

The Commission’s authorizing statute requires us to consider annually whether Medicare’s payments are adequate for the efficient provision of services delivered to beneficiaries. To conduct this assessment, the Commission uses a framework of payment adequacy indicators applied to all sectors. The framework entails a review of beneficiary access to care, providers’ access to capital, quality, and Medicare payments and providers’ cost. The Commission uses different measures and criteria for each sector, based on a sector’s specific circumstances, data availability, and relevance of the measures.

In conducting the annual payment adequacy assessment, the Commission generally strives to balance multiple priorities: ensuring the program provides beneficiaries with access to high-quality care in an appropriate setting, assuring the best use of Medicare taxpayer and beneficiary dollars, giving providers an incentive to supply efficient and appropriate care, and paying them equitably. The payment adequacy assessment seeks to determine whether an update is needed (or whether current payment rates are adequate). The decision of whether an update is necessary and the size of that update is based on the Commission’s judgment in the context of the payment adequacy indicators. (See text box for a summary of the Commission’s most recent assessment of payment adequacy for clinician services.)

Specifically, for clinician payment adequacy, the Commission reviews measures of direct access to care, treating beneficiaries grew apace with fee-for-service (FFS) beneficiary growth. Second, quality remained indeterminate. Third, Medicare FFS payment rates for physician and other health professional services were 75 percent of the commercial rates of preferred provider organizations, unchanged from 2016. On the basis of these indicators, the Commission recommended no update for clinician services in 2020, which is current law (Medicare Payment Advisory Commission 2019).
two indirect measures of access (the number of clinicians billing Medicare and changes in volume), quality, and input costs (measured by the MEI). We are unable to review providers’ costs or calculate a margin because clinicians do not report their costs to Medicare; we also do not assess clinicians’ access to capital, given the many small providers and organizations that make up the clinician sector.

In responding to this mandate, our review of the various payment adequacy indicators for clinician services covers a longer time frame than does our yearly payment adequacy assessment and highlights two factors that provide additional context:

- developments in telephone survey coverage and nonresponse; and

- the effect of site-of-service changes on fee schedule volume and spending, including implications for Medicare payment policy.

**Access to care measures**

In some sectors, the Commission uses indirect measures of access such as changes in the volume of services provided and the number of providers available to Medicare beneficiaries. For the clinician sector, we conduct a telephone survey each year, assessing direct beneficiary access, supplementing this information with the number of clinicians billing Medicare and changes in the volume of services delivered.

**Direct measure of access: Beneficiary access survey**

The Commission has sponsored a telephone survey since 2003 to monitor ongoing changes in access and has used a consistent methodology over time to permit analyses of trends. The survey uses a dual-frame design to reach respondents through both landline and cell phones and oversamples certain respondent categories to improve statistical power. The telephone survey covers 4,000 Medicare beneficiaries ages 65 and over and 4,000 private insurance beneficiaries ages 18 and over.
individuals ages 50 to 64 with private insurance. The goal of surveying both groups is to help us assess whether any changes in access observed for the Medicare population are more widespread (indicating that market dynamics, changes in medical practice, and general economic changes could be factors) or are occurring for Medicare beneficiaries only (which could indicate Medicare-specific factors, including but not limited to Medicare’s payment rates).

Because the survey is small, there is some “noise” or unexplained variability from year to year in any of the measures. However, the survey results are available quickly, and the survey findings tend to be subsequently corroborated by larger surveys. Therefore, it has been a relatively reliable early indicator.

Overall, for the past decade, the share of beneficiaries having trouble finding or obtaining care has remained relatively steady. Medicare beneficiaries’ access appears to be as good as or better than access for privately insured individuals. Both Medicare beneficiaries and individuals with private insurance report more trouble finding a new primary care doctor than a specialist (Figure 4-1 and Figure 4-2).

Access challenges could appear either as difficulty finding a new clinician or as a delay in receiving needed care. Over the past decade, the share of Medicare beneficiaries waiting longer than they wanted for care has increased slightly. However, Medicare beneficiaries overall still report slightly more timely care than privately insured individuals (Figure 4-3 and Figure 4-4, p. 102).

A final measure of reported access is whether patients end up not seeking care at all. Here again, the share of Medicare beneficiaries not seeking care increased slightly over time, but the rates for Medicare continue to be slightly better than those for the privately insured (Figure 4-5, p. 103).
Among patients seeking care, share who ever waited longer than wanted for regular or routine care, Medicare and private insurance


Among patients seeking care, share who ever waited longer than wanted for illness or injury care, Medicare and private insurance

Despite the higher growth in private sector payment rates, access for Medicare beneficiaries remains as good as or better than access for privately insured individuals

These trends in reported access are notable because they occurred during a period of low payment rate updates in Medicare (payment updates have ranged between 0 percent and 1 percent since 2011). In contrast, private sector payment rates have grown faster. But this faster growth in payments (and overall higher level of payments) by private sector payers for clinician services has not translated directly into improvements in patient access to care among the privately insured individuals in our access survey.

In particular, private sector payment rates for clinician services are between 25 percent and 30 percent higher than Medicare’s payment rates, on average (Congressional Budget Office 2018, Trish et al. 2017). The Commission’s own analysis has found that this difference has grown over time as private sector rates grew more rapidly than Medicare’s payments (Congressional Budget Office 2018, Medicare Payment Advisory Commission 2019, Medicare Payment Advisory Commission 2018, Medicare Payment Advisory Commission 2017a).

Table 4-4 (p. 104) displays one commercial price index, a measure of intensity-adjusted price per service for office visits aggregated from four large commercial insurance plans with 39 million covered lives (Health Care Cost Institute 2018). Growth in the prices paid on an intensity-adjusted basis for these four commercial plans averaged 5.3 percent per year, whereas growth in Medicare’s statutory update averaged less than a half a percent per year over the same time frame.

Because the Commission’s access survey assesses both Medicare beneficiaries and privately insured individuals, we are able to compare trends in reported access for both groups. At least among the privately insured individuals in the Commission’s survey, this growth in private sector prices has translated into neither improved patient access over time nor a greater differential in access between

surveys achieved a 7 percent response rate, on average, in 2017, compared with 28 percent in 1997 (Marken 2018).

In 2016, recognizing the problems federal agencies faced with declining trends in survey response, the Office of the Assistant Secretary for Planning and Evaluation (ASPE) at the Department of Health and Human Services commissioned a technical expert panel to examine the extent of the problem of nonresponse and determine ways to ensure robust survey response. As a part of this work, ASPE commissioned a report on the trends in and implications of declining survey response rates for federally conducted household surveys. This report examined the response rates for seven surveys sponsored by the Department of Health and Human Services. These surveys differ in data collection methods, ranging from computer-assisted interviews to random-digit dialing. The study looked at response rates from 1995 to 2015 and found that while the response rate and trends differed from survey to survey, all surveys in the study experienced some decline in their response rates for the first half of the study period; additionally, six of the seven surveys experienced accelerated declines in recent years (Czajka and Beyler 2016).

For example, the Medicare Current Beneficiary Survey was among the surveys examined, and during the study period, it experienced a decline in response rate from 83 percent to 72 percent. Other surveys, like the National Health and Nutrition Examination Survey, which represents a two-year average, experienced a response decline from 82 percent from 1999 to 2000 to 79 percent.
between 2009 and 2010 but then dropped another 8 percentage points in the next two years (Czajka and Beyler 2016).

The survey research literature states that there are three common ways to classify nonresponse to a survey: noncontact, refusal, or other. Other reasons for nonresponse include issues such as language barriers or poor health. Additionally, there are environmental and social factors that can increase the rates of nonresponse, including the increased prevalence of caller ID or the growth in the number of solicitation calls. While these problems will persist as more families abandon landline telephones and cell phones become ubiquitous, there are possible solutions that survey administrators could use to maximize response rates. Among these options are providing payment incentives, reducing survey burden, using address-based sampling in combination with a mail survey mode, using multiple modes within the same survey, and conducting double or two-phase sampling (Czajka and Beyler 2016). Other studies have suggested, specifically for telephone-based surveys, that increasing the number of call attempts or lengthening the survey period could improve response rates. However, these methods tend to be costly and time intensive and can negatively impact the survey taker.

Ultimately, the Commission’s survey, along with other prominent federal household surveys and public opinion surveys, has experienced rising costs over the years. The study commissioned by ASPE underscores the fact that nonresponse is not unique to any particular survey and that declines in response rates are widespread (Czajka and Beyler 2016). However, attempts to engage participants and increase response rates can become costly and resource intensive for survey administrators (Marken 2018).

While in some instances low response rates can compromise the quality of the survey and results obtained, it is important to note that low response rates do not always compromise the quality of the data. In particular, we have not noted any degradation in accuracy for our survey (and our findings continue to track well with those of other surveys). While there have been increases in the cost of our survey, the increases match those of other high-quality, multiple-mode surveys. The weights for our survey have not unduly increased standard errors, meaning that we continue to have an adequately powered survey to detect substantive differences across population subgroups. Going forward, we plan to continue monitoring our survey’s reliability so that, if necessary, we can make methodological changes to ensure a reliable, robust assessment of directly measured beneficiary access.

**Indirect measure of access: Clinicians billing Medicare**

For the clinician sector, we track and report the number of clinicians billing Medicare to supplement the direct beneficiary access survey results. Over the past decade, the number of clinicians serving Medicare FFS beneficiaries has grown (Figure 4-6, p. 106). Among types of providers, the number of primary care and other specialty physicians increased by 1.8 and 1.5 percent per year, respectively, while the number of advanced practice registered nurses and physician assistants increased by 10.1 percent per year. As with our other payment adequacy measures, this growth is noteworthy because it occurred during a period when annual Medicare payment updates were 1 percent or less per year.

**Other clinician participation measures**

Other factors related to clinician participation in Medicare include the share of clinicians who are part of Medicare’s participating provider program, the share of claims that are paid on assignment (that is, for which clinicians accept Medicare’s payment amount as payment in full), and the number of clinicians who opt out of Medicare.

Clinicians who enroll in Medicare’s participating provider program receive a payment amount equal to 100 percent of the fee schedule amount (80 percent from the program and 20 percent from the beneficiary through coinsurance). In turn, participating providers agree to assign all their claims, meaning they take Medicare’s allowed amount as payment in full. Clinicians who are not in the participating provider program receive payments equal to 95 percent of the payment amount and can choose whether to take assignment for their claims on a claim-by-claim basis. If they do not assign a claim, providers may “balance bill” up to 109.25 percent of the fee schedule amount, with the beneficiary paying, in addition to the 20 percent coinsurance, the additional difference between 95 percent of the fee schedule amount and the amount billed.

In practice, the number of clinicians who are in Medicare’s participating provider program is very high—over 95 percent—and has been well above 90 percent for over a decade (Medicare Payment Advisory Commission 2019). Similarly, nearly all claims are
Overall, the indicators for clinicians billing Medicare are positive over the past decade.

**Indirect measure of access: Changes in the volume of services**

Changes in the volume of services delivered provide another indirect measures of access. The Commission’s measure of volume reflects both (1) the units of service and (2) the complexity (or intensity) of the service. We use this definition of volume because either component separately—the count of services or the average intensity—would be incomplete on its own. For example, a substitution of a computed tomography (CT) scan for an X-ray represents an increase in intensity but no change in the number of services.
Changes in our measure of volume can result from a number of factors, including changes in clinical practice, movement of services from the physician office to the hospital outpatient department (HOPD) setting, beneficiary health and disease prevalence, coverage of Medicare benefits, changes in technology, and beneficiary preferences. Medicare payment rates (and changes to them) also affect volume growth if, for example, clinicians favor certain services because of their relative profitablility.

Growth in the volume of clinician services in Medicare has varied over time and by type of service (Figure 4-7). After a substantial increase in the early 2000s, volume growth slowed significantly between 2010 and 2014, coinciding with similar trends across all payers and types of services after the economic recession. From 2015 through 2017, volume growth rose modestly.

The effect of site-of-service changes on fee schedule volume and spending

Overall, volume per beneficiary (which reflects changes in both the units of service and intensity) grew about 1.0 percent per year between 2012 and 2016, with growth accelerating to 1.6 percent from 2016 to 2017. However, because of how we measure volume, our figures are sensitive to shifts in the site of service.

In our payment adequacy assessments, we have generally noted that shifts in the site of service will have an effect on fee schedule volume and fee schedule spending. With respect to volume, in the March 2019 report, we noted certain services for which site-of-service shifts seem to be prevalent. For example, between 2013 and 2017, the number of chemotherapy administration services per beneficiary delivered in HOPDs grew 28.7 percent, while the number provided in physician offices declined by 13.1 percent (Medicare Payment Advisory Commission 2019, Medicare Payment Advisory Commission 2014, Medicare Payment Advisory Commission 2012). We reported that a slowdown in the rate of volume growth for imaging and tests may have been due to services shifting from the physician office to the HOPD.

A similar effect occurs with spending. In the March 2019 report to the Congress, for example, we estimated that Medicare spent $1.9 billion more in 2017 than it would have if payment rates for E&M office/outpatient visits in HOPDs were the same as rates for freestanding offices. In addition, beneficiaries’ total cost sharing for E&M office visits in HOPDs was $480 million higher in 2017 than it would have been had payment rates been the same in both settings.

Although we have not done a comprehensive review of site-of-service shifts and their impact on fee schedule volume and spending in 15 years, this chapter provides a first step toward such a review. While our volume analysis is an essential component of measuring access (as well as identifying areas of high growth that may indicate mispricing), it is incomplete in terms of revealing global trends in the provision of clinician services because part of the activity occurs in HOPDs and is obscured in the physician data.

Furthermore, because clinician services are increasingly provided in the HOPD, it may be incomplete to determine decisions on payment adequacy for clinician services without also considering payments for services delivered in the HOPD and paid through the hospital outpatient...
We have identified three categories of services for which shifts in the site of service will have differential effects on fee schedule volume and spending: E&M visits, computed tomography, and chemotherapy administration (Table 4-5).

The next sections explore each example in more detail. Overall, services shifting from the physician office to the HOPD will artificially depress our measures of fee schedule volume and fee schedule spending. And because in most instances Medicare’s total payment is higher when the service is delivered in the HOPD, total Medicare spending increases.

**Category 1: Services such as E&M visits** When E&M visits shift from the physician office to the HOPD:

- fee schedule units are unchanged,
- fee schedule volume declines,
- fee schedule spending declines, and
- total Medicare spending goes up.

Figure 4-8 illustrates the migration of an illustrative E&M service. When the E&M visit is provided in the physician office, the total RVU is 2.09. When this service is provided in an HOPD, the total RVU is 1.44. In other words, it appears that some of the RVUs disappear. When services shift from the physician office to the HOPD, these “disappearing” RVUs make it appear that

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**TABLE 4-5 Illustration of services moving from a nonfacility setting, such as a physician office, to a facility setting, such as a hospital outpatient department**

<table>
<thead>
<tr>
<th>Service example</th>
<th>Units of service</th>
<th>Volume (units x RVUs)</th>
<th>Spending</th>
<th>Implications for total Medicare spending</th>
</tr>
</thead>
<tbody>
<tr>
<td>Evaluation and management visit</td>
<td>No change</td>
<td>Decrease</td>
<td>Decrease</td>
<td>Increase</td>
</tr>
<tr>
<td>Computed tomography</td>
<td>Decrease</td>
<td>Decrease</td>
<td>Decrease</td>
<td>Increase</td>
</tr>
<tr>
<td>Chemotherapy administration</td>
<td>Disappears entirely</td>
<td>Disappears entirely</td>
<td>Disappears entirely</td>
<td>Increase</td>
</tr>
</tbody>
</table>

Note: RVU (relative value unit). Our measure of volume captures both the units of service and the intensity (measured by RVUs). Chemotherapy administration services, when they are provided in a hospital outpatient department, no longer generate a fee schedule claim. The units of service when a computed tomography service migrates may fall or may remain the same, depending on how the service is billed.
When E&M services shift from the physician office to the hospital outpatient department, some of the RVUs “disappear” in the fee schedule volume analysis.

Note: E&M (evaluation and management), RVU (relative value unit), PLI (professional liability insurance). This graphic shows the RVUs for 99213, a Level 3 E&M visit for an established patient. RVUs are for 2019.

Source: Centers for Medicare & Medicaid Services.

Volume growth is generally smaller than it would be if the services remained in the same setting over time.

Figure 4-8 illustrates what happens to volume. Figure 4-9 (p. 110) shows the effect on fee schedule spending and total spending. While fee schedule spending declines (from $75.32 to $51.90) when the E&M service moves to the HOPD, there is an additional payment through the outpatient prospective payment system (OPPS) of $115.85, which is intended to cover the facility component of the service. So Medicare’s total payment for the service is $167.75 when provided in the HOPD. Thus, though fee schedule spending for this illustrative E&M visit declines by 31 percent, total Medicare spending for the visit increases by 123 percent.

Category 2: Services such as computed tomography

The second category of services includes most imaging services (with a technical and professional component to the fee). When these services shift from the physician office to the HOPD:

- fee schedule units may change,
- fee schedule volume declines,
- fee schedule spending declines, and
- total Medicare spending goes up.

Figure 4-10 (p. 111) shows the effect on RVUs when this shift occurs. When this illustrative CT service is provided in the physician office, the total RVU is 3.26, and when it is provided in an HOPD, the total RVU is 1.21 (therefore, 2.05 RVUs “disappear”). Shifts over time from the physician office to the HOPD make it appear that volume growth is generally smaller than it would be if the services remained in the same setting over time.
Similar to the first category (services such as E&M visits), Medicare’s total payment for services in our second category is higher when provided in the outpatient department setting than in the physician office setting (Figure 4-11, p. 112). When the service shifts from the physician office to the outpatient department, fee schedule spending declines from $117.49 to $43.61 and an additional payment of $112.51 is made through the hospital OPPS. Overall, Medicare’s total payment for the service increases from $117.49 to $156.12 when the service shifts from the physician office to the HOPD.

Category 3: Services such as chemotherapy administration
The third category includes services such as chemotherapy administration. When these services shift from the physician office to the HOPD:

- fee schedule units disappear,
- fee schedule volume disappears,
- fee schedule spending disappears, and
- total Medicare spending goes up.

This category of services differs from the first and second categories (E&M visits and imaging, respectively) because when the service shifts from the physician office to the HOPD, the RVUs entirely disappear (Figure 4-12, p. 113). In other words, there is no longer a physician fee schedule claim and the entire payment for the service is made through the hospital OPPS (or another payment system).

Note: E&M (evaluation and management), PLI (professional liability insurance). The figure reflects Healthcare Common Procedure Coding System® code 99213. The outpatient prospective payment system rate in this figure is based on an E&M visit provided at an on-campus provider-based department. Spending figures are for 2019.

Source: Centers for Medicare & Medicaid Services.
Similar to the first and second categories, however, Medicare’s total payment for this illustrative service (chemotherapy administration) is higher when the service is provided in an HOPD than in a physician office (Figure 4-13, p. 114). In the physician office setting, Medicare’s fee schedule payment is $143.08. When the service is delivered in the HOPD, Medicare’s payment is twice as high—$288.38—and the payment for the service is made entirely through the hospital OPPS.

**Trends in site of service–adjusted volume**

We conducted an analysis of volume growth over the period from 2012 to 2017, holding the site of service constant between the two periods. This method allowed us to identify services that may be growing more rapidly than they may otherwise appear due to the disappearing RVUs (and spending) from the fee schedule as the service shifts from a high-RVU to a low-RVU setting.

Our analysis adjusts for the first two categories discussed previously: (1) services such as E&M visits where the place of service shifts from the nonfacility to the facility setting, or vice versa, and (2) services such as CT scans that can be billed either as a global payment or separately for the professional and technical components. In future analyses, we plan to adjust for the third category of services such as chemotherapy administration.

Overall, annual volume growth in the fee schedule over the past six years would be higher if site-of-service shifts were accounted for. Specifically, average annual volume growth in the fee schedule over the past six years would be higher if site-of-service shifts were accounted for.
volume growth from 2012 through 2017, holding site of service constant, would have been 1.5 percent per year, instead of 1.1 percent per year (Figure 4-14, p. 115). In other words, if services in 2017 were delivered in proportionally the same setting as they were in 2012, volume growth over that period would have been nearly 40 percent higher—1.5 percent per year versus 1.1 percent per year.

By type of service, there are disparate trends in services shifting across settings. Most commonly observed are E&M visits shifting to the HOPD, which is consistent with continued hospital acquisition of physician practices (Medicare Payment Advisory Commission 2017a). Imaging, which grew only by 0.1 percent per year on an unadjusted basis, grew by 1.2 percent per year when site of service is held constant. Similarly, the unadjusted volume growth for tests was 0.3 percent per year, while the site of service–adjusted volume growth was 1.0 percent per year. However, when we adjust for site-of-service shifts, we see that the volume growth for major procedures was lower than the unadjusted rates (1.5 percent per year for the adjusted rates vs. 2.2 percent per year for the unadjusted rates).

The effect of adjusting for shifts in site of service is even more significant for particular services (Table 4-6, p. 116). For example, certain imaging services—ultrasound, CT, magnetic resonance, and nuclear imaging—grew by more than 1.0 percentage point per year faster between 2012 and 2017 when site of service is held constant. And cardiography test volume grew by 2.0 percentage points per year when the site of service is held constant, as compared with negative annual growth for the unadjusted rates.

Holding site of service constant reveals other changing practice patterns. Major vascular procedures, for
When chemotherapy administration services shift from the physician office to the hospital outpatient department, all of the RVUs “disappear” in the fee schedule volume analysis.

<table>
<thead>
<tr>
<th>RVUs</th>
<th>Practice expense</th>
<th>Work</th>
<th>PLI</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>3.61</td>
<td>0.28</td>
<td>0.08</td>
</tr>
<tr>
<td>Total RVUs: 3.97</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>All of the RVUs “disappear” from the fee schedule volume analysis</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: RVU (relative value unit), PLI (professional liability insurance). The figure reflects Healthcare Common Procedure Coding System® code 96413 (corresponding to Ambulatory Payment Classification 5694) chemotherapy administration. RVUs are for 2019.

Source: Centers for Medicare & Medicaid Services.

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example, are unlike most other services in that volume growth is lower when the site of service is held constant (Table 4-6, p. 116). The difference is due to rapid growth of angioplasty, stenting, and other procedures for treatment of peripheral artery disease. Most of this growth has occurred in the high-RVU physician office setting. Such growth is consistent with media reports of increases in stenting for peripheral vascular disease, supplanting a decrease in the volume of cardiac stents (Creswell and Abelson 2015).

We are still developing the mechanism to adjust fee schedule volume for our third category of services, characterized by chemotherapy administration. Such services (1) generate a fee schedule claim when performed in noninstitutional settings; and (2) generate claims in other payment systems (e.g., the OPPS) when performed in institutional settings, with no associated fee schedule claim. The services in this category include radiation therapy, other tests (e.g., skin, audiology, cardiology), and chemotherapy or intravenous injection services.6

For the 169 billing codes we identified in the third category, total fee schedule spending was $2.7 billion in 2017 and accounts for nearly all spending associated with the chemotherapy administration and injection/infusion (non-oncologic) services. The fact that the modest spending for these services (relative to all fee schedule spending) is concentrated in a few service types suggests that adjusting for shifts in the site for these services may have a limited impact on overall fee schedule volume but would likely substantially affect the volume analysis for the few service types in which these services are concentrated.
Implications for Medicare payment policy

In addition to providing a deeper understanding of trends in services provided by clinicians, examining site-of-service shifts suggests that Medicare payment policy changes may be necessary.

One of the Commission’s principles has been that a prudent purchaser of health care (supported by the financial constraints facing the Medicare program and the beneficiaries and taxpayers who fund it) should not pay more for a service than is necessary to provide high-quality care. Along these lines, the Commission has made recommendations for site-neutral policies for certain services. First, the Commission recommended adjusting payment rates in the OPPS so that Medicare pays the same amount for E&M office/outpatient visits in freestanding physician offices and HOPDs (Medicare Payment Advisory Commission 2012). Beginning in 2019, Medicare will pay a comparable amount for E&M office/outpatient visits in freestanding physician offices and off-campus HOPDs; however, Medicare will continue to pay a higher amount for these visits when provided in on-campus outpatient departments. Second, the Commission also recommended adjusting OPPS rates for services in ambulatory payment classification groups that meet certain criteria so that payment rates are equal or more closely aligned between HOPDs and freestanding offices (Medicare Payment Advisory Commission 2014).

However, other approaches may be feasible for setting payment rates for services provided in multiple settings. For example, some of the services that show the greatest shift in setting over the past five years are imaging and tests. Certain imaging services, in particular, do not involve substantial clinician work but do constitute
substantial practice expense costs for the equipment and so may lend themselves to a different price-setting and updating mechanism from other fee schedule services (in contrast to E&M services, for which about half of the valuation is for the clinician work component).

**Quality**

Over the past decade, CMS has generally measured the quality of care provided by clinicians using sets of clinician-chosen and clinician-reported quality measures. Starting in 2007, clinicians qualified for an incentive payment by reporting quality measures through the voluntary Physician Quality Reporting Initiative. The program was rebranded as the Physician Quality Reporting System (PQRS) in 2010 and began imposing a payment penalty for nonreporting in 2015. At that time, CMS began to adjust payments to clinicians based on the cost and quality of care they provided using the PQRS set of clinician-reported measures plus a set of claims-calculated cost measures under the value modifier program.

Starting in 2019, CMS makes payment adjustments to clinician services through the Merit-based Incentive Payment System (MIPS). MIPS is an individual clinician–level payment adjustment that adjusts Medicare FFS payments based on performance in four areas: quality, resource use, clinical practice improvement activities, and promotion of interoperability. It generally relies on many of the measures and processes used in prior efforts. Due to the Commission’s serious concerns about MIPS, in 2018 the Commission recommended its repeal and outlined a path forward on clinician quality measurement (Medicare Payment Advisory Commission 2018).

To assess overall clinician quality, the Commission has generally reviewed a set of population-based measures assessing avoidable hospitalizations for ambulatory...
Table 4-6

Average annual growth in volume of clinician services per fee-for-service beneficiary, with adjustment for changes in site of service and bundling, 2012–2017

<table>
<thead>
<tr>
<th>Type of service</th>
<th>Change in volume per beneficiary</th>
<th>Not holding site of service constant</th>
<th>Holding site of service constant</th>
</tr>
</thead>
<tbody>
<tr>
<td>All services</td>
<td></td>
<td>1.1%</td>
<td>1.5%</td>
</tr>
<tr>
<td>Evaluation and management</td>
<td></td>
<td>1.0</td>
<td>1.5</td>
</tr>
<tr>
<td>Office/outpatient services</td>
<td></td>
<td>1.5</td>
<td>2.4</td>
</tr>
<tr>
<td>Hospital inpatient services</td>
<td></td>
<td>-1.3</td>
<td>-1.3</td>
</tr>
<tr>
<td>Emergency department services</td>
<td></td>
<td>1.0</td>
<td>1.0</td>
</tr>
<tr>
<td>Nursing facility services</td>
<td></td>
<td>2.5</td>
<td>2.5</td>
</tr>
<tr>
<td>Ophthalmological services</td>
<td></td>
<td>0.1</td>
<td>0.3</td>
</tr>
<tr>
<td>Critical care services</td>
<td></td>
<td>1.5</td>
<td>1.5</td>
</tr>
<tr>
<td>Care management/coordination</td>
<td></td>
<td>32.3</td>
<td>32.4</td>
</tr>
<tr>
<td>Observation care services</td>
<td></td>
<td>6.5</td>
<td>6.6</td>
</tr>
<tr>
<td>Home services</td>
<td></td>
<td>-1.1</td>
<td>-1.1</td>
</tr>
<tr>
<td>Imaging</td>
<td></td>
<td>0.1</td>
<td>1.2</td>
</tr>
<tr>
<td>Standard X-ray</td>
<td></td>
<td>-0.3</td>
<td>0.3</td>
</tr>
<tr>
<td>Ultrasound</td>
<td></td>
<td>-1.0</td>
<td>0.2</td>
</tr>
<tr>
<td>CT</td>
<td></td>
<td>3.1</td>
<td>4.1</td>
</tr>
<tr>
<td>MRI</td>
<td></td>
<td>1.5</td>
<td>2.6</td>
</tr>
<tr>
<td>Nuclear</td>
<td></td>
<td>-2.8</td>
<td>-0.7</td>
</tr>
<tr>
<td>Major procedures</td>
<td></td>
<td>2.2</td>
<td>1.5</td>
</tr>
<tr>
<td>Musculoskeletal</td>
<td></td>
<td>3.0</td>
<td>2.7</td>
</tr>
<tr>
<td>Vascular</td>
<td></td>
<td>8.3</td>
<td>2.4</td>
</tr>
<tr>
<td>Cardiovascular</td>
<td></td>
<td>1.4</td>
<td>2.4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Type of service</th>
<th>Change in volume per beneficiary</th>
<th>Not holding site of service constant</th>
<th>Holding site of service constant</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other procedures</td>
<td></td>
<td>1.5</td>
<td>1.9</td>
</tr>
<tr>
<td>Skin</td>
<td></td>
<td>1.7</td>
<td>2.6</td>
</tr>
<tr>
<td>Physical, occupational, and speech therapy</td>
<td></td>
<td>5.6</td>
<td>5.7</td>
</tr>
<tr>
<td>Musculoskeletal</td>
<td></td>
<td>1.5</td>
<td>2.2</td>
</tr>
<tr>
<td>Eye</td>
<td></td>
<td>1.1</td>
<td>1.1</td>
</tr>
<tr>
<td>Radiation oncology</td>
<td></td>
<td>-0.7</td>
<td>0.4</td>
</tr>
<tr>
<td>Other organ systems</td>
<td></td>
<td>2.4</td>
<td>2.6</td>
</tr>
<tr>
<td>Digestive/gastrointestinal</td>
<td></td>
<td>0.1</td>
<td>0.8</td>
</tr>
<tr>
<td>Dialysis</td>
<td></td>
<td>0.1</td>
<td>0.2</td>
</tr>
<tr>
<td>Vascular</td>
<td></td>
<td>3.1</td>
<td>2.7</td>
</tr>
<tr>
<td>Chiropractic</td>
<td></td>
<td>-2.2</td>
<td>-2.2</td>
</tr>
<tr>
<td>Injections and infusions: non-oncologic</td>
<td></td>
<td>-2.2</td>
<td>-1.8</td>
</tr>
<tr>
<td>Chemotherapy administration</td>
<td></td>
<td>-3.7</td>
<td>-3.5</td>
</tr>
<tr>
<td>Tests</td>
<td></td>
<td>0.3</td>
<td>1.0</td>
</tr>
<tr>
<td>Anatomic pathology</td>
<td></td>
<td>0.0</td>
<td>0.3</td>
</tr>
<tr>
<td>Cardiography</td>
<td></td>
<td>-0.5</td>
<td>2.0</td>
</tr>
<tr>
<td>Neurologic</td>
<td></td>
<td>1.0</td>
<td>0.8</td>
</tr>
</tbody>
</table>

Note: CT (computed tomography), MRI (magnetic resonance imaging). Volume is measured as units of service multiplied by each service’s relative value unit (RVU) from the fee schedule. To put service use in each year on a common scale, we used the RVUs for 2017. Use of behavioral health services is not shown because of a change in billing codes implemented in 2013. Some low-volume categories are not shown but are included in the summary. To hold site of service constant, we allowed units of service to change but held constant each billing code’s proportional distribution of units, by payment modifier and place of service.

Source: MedPAC analysis of claims data for 100 percent of Medicare beneficiaries.

care–sensitive conditions, which can help gauge the quality of ambulatory care (Medicare Payment Advisory Commission 2019). Over the past seven years, these rates have mostly improved (Figure 4-15).

The Commission has also presented results on the prevalence and trends of low-value care, finding substantial use of low-value care in FFS Medicare (Medicare Payment Advisory Commission 2018). Overall, the collective assessment as part of the payment adequacy assessment is that clinician quality has been indeterminate.

**Medicare’s payments and clinicians’ costs**

Clinicians do not report their costs to Medicare, so we are unable to assess clinician costs or calculate a margin. In lieu of financial performance, we report a measure
We also compare how Medicare FFS payment rates for physician and other health professional services compare with commercial rates for preferred provider organizations (PPOs). In 2017, Medicare’s payment rates were 75 percent of commercial rates for PPOs, unchanged from 2016. This analysis uses data on paid claims for PPO members of a large national insurer that covers a wide geographic area across the United States. This rate has fallen slightly since 2010 (when it was 81 percent). This pattern is due to faster growth in commercial rates and largely stable Medicare rates (consistent with the Health Care Cost Institute data we use to examine payment rates in the commercial sector) (Congressional Budget Office 2018).

Figure 4-16 (p. 118) shows the growth in the MEI over the past decade, averaging about 1 percent per year.
Finally, we consider median compensation by specialty. Persistent income disparities between primary care physicians and certain other specialties raise concerns about fee schedule mispricing for ambulatory E&M services relative to other services, such as procedures. Median compensation in 2017 was much lower for primary care physicians than for physicians in specialty groups such as radiology and nonsurgical, procedural specialties.

Conclusion

Overall, our review of Medicare’s payment updates and our measures of payment adequacy show stable access to clinician services for Medicare beneficiaries over the past decade and as good or better access compared with privately insured individuals. Nevertheless, our work signals a number of areas of policy interest, including site-neutral payment policies; the need to address persistent disparities in physician compensation by specialty that may lead to issues in the future supply of primary care services; and disproportionate growth in certain services, suggesting that prices may be too high.

Medicare’s yearly payment rate update for clinician services has ranged from no update to 1 percent over the past decade. This range is consistent with the updates from 2015 through 2018 (0.5 percent), 2019 (0.25 percent), and 2020 to 2025 (no update). To date, there has been largely stable access to clinician services for Medicare beneficiaries in the context of these payment updates.

The statutory mandate directing the Commission to conduct this evaluation requires us to make recommendations for future updates to fee schedule payment rates that would be necessary to ensure Medicare beneficiaries’ access to care. The trends we have observed over the last decade suggest that updates in the range of 0 percent to 1 percent have been sufficient to ensure beneficiary access to care. Further, the fact that commercial payment rates for clinician services are higher than Medicare’s fee schedule rates, but that
approach to assessing the adequacy of Medicare payments, not only in the clinician sector but also across all FFS sectors, is to evaluate the most currently available data on measures of payment adequacy and advise the Congress accordingly on our recommended payment updates on a year-by-year basis. We have done so for the 2020 payment year in our March 2019 report to the Congress, and going forward, we will continue to advise the Congress as necessary to ensure Medicare beneficiaries can obtain high-quality, needed clinician services in a timely way.

In fulfilling this mandate, we refrain from mapping out a series of future updates and instead are best able to provide guidance to the Congress by continuing to conduct our yearly payment adequacy assessment. The Commission’s commercially insured patients report access to care that is generally comparable to or slightly worse than Medicare beneficiaries raises questions about the relationship between payment rates and access, suggesting that other factors may be more important than payment rate updates in maintaining beneficiary access to clinician services.

commercially insured patients report access to care that is generally comparable to or slightly worse than Medicare beneficiaries raises questions about the relationship between payment rates and access, suggesting that other factors may be more important than payment rate updates in maintaining beneficiary access to clinician services.
Endnotes

1 CMS’s Office of the Actuary reports that Medicare benefit outlays for physician fee schedule services were $69.1 billion in calendar year 2017.

2 Pursuant to statute, if the changes in RVUs for any year exceed $20 million, CMS is required to apply a budget-neutrality adjustment to the conversion factor.

3 This analysis differs from our analysis of private preferred provider organization rates because it uses different data sources and methods. However, the overall pattern of higher private-payment rates (and faster growth rates) than Medicare continues to be true.

4 Changes in units may depend on how a service was originally billed in the physician office (nonfacility) setting. For example, if the professional and technical components of a CT were billed separately in a physician office, fee schedule units would decrease if that CT shifted to an HOPD because only one claim (the professional component) would be billed under the fee schedule (and the technical component would be billed under the OPPS).

5 Our specific analytic approach holds the share of services billed in a facility and nonfacility setting constant over the period examined within each HCPCS code. To do so, we used the place of service variable for most services. For other services (e.g., certain radiology services), we adjusted our service counts to reflect the fact that the same service could be billed as one claim (a global claim) or as two claims (separate technical and professional claims).

6 A fourth set of codes (physical, occupational, and speech–language pathology services) also affects fee schedule volume and spending when they shift settings, but because the services are paid the fee schedule rate no matter where they are performed, there is no financial incentive for the services to migrate to a higher cost setting. For that reason, we do not discuss those codes in detail.
References


